

The Identity of the Common Keyhole Limpet of South-Eastern Australia (Fissurellidae)

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The common, large species of *Diodora* from south-eastern Australia has been known since 1924 as *Elegidion audax* Iredale (1924). This binomen was introduced by Iredale to replace *Fissurella lineata* Sowerby, 1835, described from unknown locality, and its synonym *F. incii* Reeve, 1850 which was said to have been collected from "Raine Island, Torres Straits". Examination of material in the British Museum (Natural History) has shown that specimens of *F. incii* were wrongly localised and agree exactly with shells from New South Wales (compare figs. 1-6 with 7-15). There is also no known species in the Torres Straits north-eastern Queensland area that closely resembles *F. incii* (i.e. *lineata*).

Iredale (1924) argued that a new name was warranted on the basis of locality (in the case of *incii*) and on a point in Sowerby's (1835) description (in the case of *lineata*). Sowerby described the internal margin of the foramen (i.e. of the surrounding callus) as being truncated posteriorly in *F. lineata* and Iredale states that the southern Australian shell does not show this feature. However, Iredale's figured syntype (figs. 9-11) (a small specimen), and most small specimens of this species, do show a posterior truncation of the callus. Because Sowerby's original figure (which is presumably actual size) is only 23.3 mm long it would also be expected to show this feature.

A brief synonymy of *F. lineata* appears below.

Diodora (*Elegidion*) *lineata* (Sowerby, 1835). Plate 1, figs 1-15.

Fissurella lineata Sowerby, 1835: 7, pl. 78, fig. 68; Sowerby, 1866: 195, pl. 241, figs. 134, 135.

Fissurella incii Reeve, 1850, pl. 10, figs 69a, 8.

?*Fissurella australis*; T. Woods, 1877: 44 (non Krauss, 1848).

Glyphis lineata; Hedley, 1900: 95, pl. 3, fig. 11 (animal).

Fissurella mccoysi (T. Woods MS) Pritchard & Gatliff, 1903: 185 (nomen nudum).

Elegidion audax Iredale, 1924: 220, pl. 35, figs 5, 6.

Elegidion (err.) *audax*; Macpherson, 1966: 207.

It appears that the types of Sowerby's (1866) figured specimen of *F. lineata* probably came from the same lot as *F. incii* and both names appear on the labels with the material. None of the

specimens in the British Museum (Natural History) agree exactly with the figures given by Sowerby or Reeve, but in the case of Sowerby's figures these were often composite. One specimen closely fits the dimensions of one of the original figures of *F. incii* and all agree well in all but individual, minor details. There is little doubt that the specimens examined are part of the original series of *F. incii* and can be regarded as syntypes of *F. incii*. The types of *D. lineata* (Sowerby) appear to be lost. They were 2 specimens from the G. Humphreys collection and Sowerby (1835) states that they were "now in Mr. Cuming's (collection)". No trace of these can be found in the British Museum, but the original figure is a good one and there can be little doubt as to its specific identity.

<i>Dimensions:</i>	Length	Width	Height	Length of foramen
Figured syntypes of <i>lineata</i>	44.82 mm	29.60 mm	16.93 mm	3.84 mm
	38.22 mm	23.86 mm	12.80 mm	3.46 mm
Syntypes of <i>E. audax</i>				
Iredale				
largest	54.60 mm	35.20 mm	23.84 mm	4.62 mm
Iredale's figured specimen	18.17 mm	11.06 mm	5.76 mm	1.94 mm

Range: Burleigh Heads, S. Qld. (C. 98620) to Port Phillip Bay (Macpherson, 1966) and Flinders, Vic. (Burn, 1959). T. Woods (1877) recorded the South African species *Fissurella australis* Krauss from Tasmania and this was regarded by Tate & May (1901) as being a misidentification of *lineata*. May (1921), however, rejected the Tasmanian record of *lineata*.

Elegidion Iredale, 1924 is used as a subgenus of *Diodora* Gray, 1821 following Knight *et al.* (1960). The external appearance of the living animal is described by Hedley (1900) and Burn (1959).

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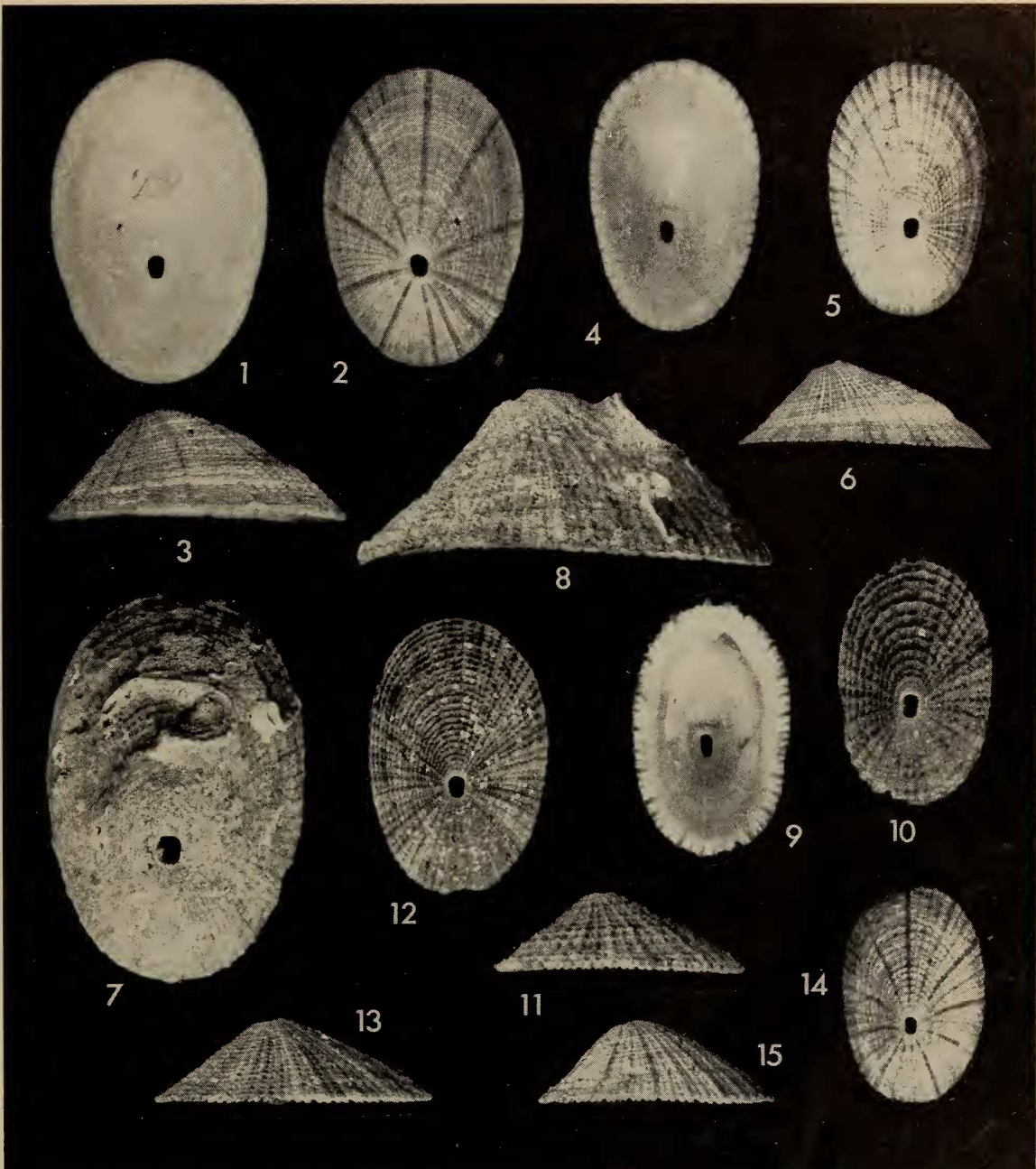


Plate 1. *Diodora (Elegidion) lineata* (Sowerby).

Figures 1-6 Probable syntypes of *Fissurella incii* (British Museum (Natural History registered number 197546).

7-11 Syntypes of *Elegidion audax* Iredale Twofold Bay, N.S.W. (C. 99178).*

12-13 Balmoral, Sydney Harbour, N.S.W. (C. 76384).

14-15 Kurnell, Botany Bay, N.S.W. (C. 88654).

* Australian Museum registered number.

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